THE CLAIMS

What is claimed is:

1. A remote control for programming a hearing instrument comprising:

a housing; and

a mechanism associated with the housing for mechanically generating an acoustical pulse for effecting control of a hearing instrument.

2. The remote control of claim 1, wherein the mechanism is passive.

3. The remote control of claim 1, wherein the mechanism is a finger actuatable member coupled to a reed.

4. The remote control of claim 1, wherein the mechanism comprises at least one cogged wheel that is rotationally positioned in the housing and at least one reed cantilevered to contact each cogged wheel, wherein each coupled wheel and reed are together configured to generate an acoustical pulse upon rotation of the wheel against the reed.

5. The remote control of claim 4, wherein the reed is fixed to a surface inside the housing.

6. The remote control of claim 4, wherein the at least one cogged wheel comprises a plurality of cogged wheels, with each wheel being coupled to the at least one reed for generating a unique acoustical pulse associated with each of the plurality of cogged wheels.

7. The remote control of claim 6, wherein the plurality of cogged wheels includes at least a first cogged wheel, a second cogged wheel, and a third cogged wheel, with the first cogged wheel having a first spacing of cogs on the wheel, the second cogged wheel having a second spacing of cogs on the wheel, and the third cogged wheel having a third

spacing of cogs on the wheel, with the first, second, and third spacings each being different from one another.

8. The remote control of claim 7, wherein the acoustical pulses are emitted in sequence with the spacings of the respective cogs.

9. The remote control of claim 1, wherein the mechanism comprises at least one sliding push button having a surface treatment coupled to a reed for generating an acoustical pulse upon movement of the push button.

10. The remote control of claim 9, wherein the sliding push button comprises a bar-like member and the surface treatment comprises a plurality of cogs, and the reed is cantilevered in the housing so that one end of the reed is associated with the cogs for vibratory movement relative thereto.

11. The remote control of claim 10, wherein the at least one sliding push button comprises a plurality of push buttons.

12. The remote control of claim 1, further comprising indicia on the housing.

13. A hearing instrument system comprising:

a hearing instrument having a microphone and programming; and

the remote control of claim 1, wherein the programming is configured to interpret the acoustical pulses to effect control of the hearing instrument.

14. A hearing instrument system comprising:

a hearing instrument having programming;

a wireless remote control configured to emit a mechanically generated acoustical pulse, wherein the programming of the hearing instrument is configured to interpret the acoustical pulse to program the hearing instrument.

15. The hearing instrument system of claim 14, wherein the programming of the hearing instrument includes one of a decoding circuit and decoding software for interpreting the acoustical pulse generated by the remote control.

16. The hearing instrument system of claim 15, wherein the decoding circuit or decoding software includes a high pass filter for removing interfering energy, a full-wave rectifier followed by a low-pass filter for transforming the acoustical pulses into base band pulses, and programming for measuring the time spacing of the acoustical pulses to verify that the received pulses match a pulse pattern associated with a command for the hearing instrument.

17. The hearing instrument system of claim 16, further comprising programming for disabling the decoding circuit.

18. The hearing instrument system of claim 17, wherein the programming for disabling the decoding circuit comprises means for calculating a pulse-to-noise ratio at the output of the low-pass filter to determine whether the pulse-to-noise ratio exceeds a predetermined threshold.

19. The hearing instrument system of claim 14, wherein the wireless remote control is passive and the hearing instrument includes a built-in microphone, with the microphone being configured to accept the acoustical pulses from the remote control to effect control of the hearing instrument.

20. A method for controlling a hearing instrument comprising:
generating a remote acoustical pulse;
receiving the acoustical pulse through a microphone of a hearing instrument;
decoding the acoustical pulse in a program of a hearing instrument; and
controlling the hearing instrument based upon the decoded acoustical pulse.

21. The method of claim 20, wherein the decoding the pulse step comprises utilizing a decoding circuit or decoding software programmed in the hearing instrument.

22. The method of claim 21, wherein the decoding the pulse step further comprises high-pass filtering the acoustical pulses received by the microphone to remove interfering energy, full-wave rectifying and low-pass filtering the acoustical pulses into base band pulses, and determining the time spacing of the band pulses to verify that the band pulses match a pattern associated with a command for the hearing instrument.

23. The method of claim 22, further comprising disabling the decoding step by determining that a false triggering has occurred, with the false triggering being determined by calculating a pulse-to-noise ratio and comparing the ratio to a predetermined threshold.